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system controller 70. Preferably, the system controller 70 is an airbag control module that is in communication with the ECU 66 such that the deployment force of the airbag 24 is controlled based on seat occupant weight. The system controller 70 could also be used to control the force of seat belt pretensioners based on occupant weight. —

IN THE CLAIMS

Please amend the following claims. A marked up version of the claims is attached in Appendix B. Please add new dependent claims 21-23.

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1. (Twice Amended) A system for measuring weight of an occupant seated on a vehicle seat comprising:

a first track mounted to a vehicle structure;
a second track supported for movement relative to said first track for adjustment along a longitudinal axis and being deflectable in a vertical direction due to an occupant weight force generated by the occupant sitting on the vehicle seat; and

at least one sensor mounted on one of said tracks for generating a signal representative of said occupant weight force.

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7. (Twice Amended) A system according to claim 6 including a third track mounted to the vehicle structure, a fourth track supported for movement relative to said third track for adjustment along a longitudinal axis and being deflectable in a vertical direction due to said occupant weight force generated by the occupant sitting on the vehicle seat, and a third sensor mounted on one of said third or fourth tracks working with said first and second sensors to generate said signal, said first and second tracks forming an inboard track assembly and said third and fourth tracks forming an outboard track assembly.

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8. (Twice Amended) A system for measuring weight of an occupant seated on a vehicle seat comprising:

an inboard track assembly mounted to a vehicle structure;

an outboard track assembly spaced apart from said inboard track assembly and mounted to the vehicle structure;

a first sensor assembly mounted to said inboard track assembly for generating a first signal in response to measuring deflection of said inboard track assembly due to seat occupant weight generated by the occupant sitting on the vehicle seat;

a second sensor assembly mounted to said outboard track assembly for generating a second signal in response to measuring deflection of said outboard track assembly due to seat occupant weight generated by the occupant sitting on the vehicle seat; and

a central processor for determining seat occupant weight based on said first and second signals.

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14. (Twice Amended) A method for determining weight of a seat occupant comprising the steps of:

providing an inboard seat track assembly mounted to a vehicle structure and an outboard seat track assembly spaced apart from the inboard seat track assembly and mounted to the vehicle structure where the inboard and outboard seat track assemblies are defined by a predetermined cross-sectional area and each track assembly has at least one track segment with a cross-sectional area that is less than the predetermined cross-sectional area;

mounting a first sensor assembly in the track segment of the inboard seat track assembly;

mounting a second sensor assembly in the track segment of the outboard seat track assembly;

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generating a first signal from the first sensor assembly in response to deflection of the inboard track assembly due to seat occupant weight generated by the occupant sitting on the vehicle seat;

generating a second signal from the second sensor assembly in response to deflection of the outboard track assembly due to seat occupant weight generated by the occupant sitting on the vehicle seat; and

combining the first and second signals to determine seat occupant weight.

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19. (Amended) A system for measuring seat occupant weight comprising:
a first seat track fixed to a vehicle structure;
a second seat track supported for movement relative to said first seat track for adjustment along a longitudinal axis, said first and second seat tracks being deflectable in a vertical direction due to an occupant weight force generated by an occupant sitting on a vehicle seat; and
at least one sensor mounted directly to said first seat track to generate a weight signal by measuring deflection of said seat tracks due to seat occupant weight.

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21. (New) A system according to claim 1 wherein said sensor is mounted to said first track.

22. (New) A system according to claim 8 wherein said inboard and outboard track assemblies each have a first track member mountable to a vehicle structure and a second track member mounted for movement relative to said first track member via an adjustment assembly and wherein said first and second sensor assemblies are mounted to said first track members.

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23. (New) A method according to claim 14 wherein said inboard and outboard track assemblies each have a first track member mountable to a vehicle structure and a second track member mounted for sliding movement relative to said first track member and including the steps of mounting the first sensor assembly to the first track member of the inboard track assembly and mounting the second sensor assembly to the first track member of the outboard track assembly.
